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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/836,712	04/17/2001	Leonard Buckbinder	PC10851A	7154

7590 07/02/2002

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EXAMINER
HADDAD, MAHER M

ART UNIT	PAPER NUMBER
1644	9

DATE MAILED: 07/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/836,712	BUCKBINDER ET AL.	
	Examiner	Art Unit	
	Maher M. Haddad	1644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 April 2001 and 4-10-02* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) *1,2 and 5-14* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3,4 and 15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *6* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 1-15 are pending.

2. Applicant's election of Group II, claims 3-4 and 15, and metalloproteinase domain as the species in Paper No. 8 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Since the elected species, metalloproteinase domain, is now found to be free of the prior art, the prior art search has been extended to disintegrin domain, prodomain, and thrombospondin submotif.

3. Claims 1-2 and 5-14 are withdrawn from further consideration by the Examiner, 37 C.F.R. § 1.142(b) as being drawn to nonelected inventions.

4. Claims 3-4 and 15 drawn to a polypeptide of SEQ ID NO:2 encoded by SEQ ID NO:1, metalloproteinase domain, disintegrin domain, prodomain, and thrombospodin submotif thereof, are under examination.

5. Applicant's IDS, filed 9-7-01 (Paper No. 6), is acknowledged. The European Search Report crossed out on Form PTO-1449 has been considered.

6. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

The specification on page 1, lines 13, contains hyperlinks. The attempt to incorporate subject matter into the patent application by reference to a hyperlink and/or other forms of browser-executable code is considered to be an improper incorporation by reference.

7. Please see the enclosed form PTO-948 for the Draftsperson comments on views not labeled separately for Figures 1 and 3-4. Applicants are required to amend the Brief Description of the Drawings on page 7 to reflect the changes.

8. The amendment filed 04/17/01 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The "incorporated by reference" to U.S. application serial no. 60/200,040 on page 1 of the specification does not enjoy the status as part of the original disclosure in the application because the amendment is not referred to in the oath.

9. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because: the oath does not refer to the preliminary amendment filed 04/17/01.

10. Claims 3-4 and 15 are objected to because they are dependent on a non-elected claim 1 and should be written as independent claims.

11. Claim15 is objected to under 37 CFR 1.75(c), as being of improper dependent form because a multiple dependent claim cannot depend from two sets of claims drawn to different features.

12. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 3-4 and 15 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the polypeptide or a composition of SEQ ID NO: 2 and metalloproteinase (aa 98-311 of SEQ ID NO:2), disintegrin domain (aa 324-394 of SEQ ID NO: 2), prodomain (aa 1-97 of SEQ ID NO:2), and thrombospondin submotif (aa 410-473 and 1099-1156 of SEQ ID NO:2) for identifying a substrate for ADAMTS-M does not reasonably provide **enablement** for any polypeptide encoded by any nucleotide sequence having at least 80% identity to a nucleotide sequence encoding an ADAMTS-M polypeptide of SEQ ID NO:2, or any metalloproteinase, disintegrin domain, prodomain, or thrombospondin submotif thereof in non-elected base claim 1a; any polypeptide encoded by any nucleotide sequence of at least 15 contiguous nucleotide that hybridizes under stringent conditions to the polynucleotide molecule of SEQ ID NO:1 in non-elected base claim 1b or the complement of nucleotide sequence of non-elected base claim 1a or 1b; any polypeptide which comprises an amino acid sequence that is a metalloproteinase, disintegrin domain, prodomain, or thrombospondin submotif in claim 4; or a pharmaceutical composition for the treatment of arthritis (osteoarthritis and rheumatoid arthritis), inflammatory bowel disease, Crohn's disease, emphysema, acute respiratory distress syndrome, asthma, chronic obstructive pulmonary disease, Alzheimer's disease, organ transplant toxicity and rejection, cachexia, allergy, cancer (such as solid tumor cancer including colon, breast, lung, prostate, brain and hematopoietic malignancies including leukemia and lymphoma), tissue ulcerations, restenosis, periodontal disease, epidermolysis bullosa, osteoporosis, loosening of artificial joints implants, atherosclerosis (including atherosclerotic plaque rupture), aortic aneurysm (including abdominal aortic and brain aortic aneurysm), congestive heart failure,

myocardial infarction, stroke, cerebral ischemia, head trauma, spinal cord injury, neurodegenerative diseases (acute and chronic), autoimmune disorders, Huntington's disease, Parkinson's disease, migraine, depression, peripheral neurophathy, pain, cerebral amyloid angiopathy, nootropic or cognition enhancement, amyotrophic lateral sclerosis, multiple sclerosis, ocular angiogenesis, corneal injury, macular degeneration, abnormal wound healing, burns, infertility or diabetic shock in claim 15. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and or use the invention commensurate in scope with this claim.

The specification does not provide a sufficient enabling description of the claimed invention. The specification discloses only a single polypeptide sequence (SEQ ID NO:2) encoded by a single polynucleotide (SEQ ID NO:1) with a disclosed metalloproteinase activity (e.g., page 2 at line 19). The instant claims encompass in their breadth *any* polypeptide encoded by "a nucleotide sequence having at least 80% identity to a nucleotide sequence encoding an ADAMTS-M polypeptide of SEQ ID NO:2, or a metalloproteinase, disintegrin domain, prodomain, or thrombospondin submotif" or its complement; any polypeptide encoded by "nucleotide sequence of at least 15 contiguous nucleotides that hybridizes under stringent conditions to the polynucleotide molecule of SEQ ID NO:1"; *any* polypeptide encoded by "the complement of the nucleotide sequence of at least 15 contiguous nucleotide that hybridizes under stringent conditions to the polynucleotide molecule of SEQ ID NO:1"; or any polypeptide which comprises an amino acid sequence that is a metalloproteinase, disintegrin domain, prodomain, or thrombospondin submotif, thereof in claim 4.

There appears to be insufficient guidance in the specification as filed as to how the skilled artisan would make and use the various polypeptides recited in the instant claims. A person of skill in the art would not know which sequences are essential, which sequences are non-essential, and what particular sequence lengths identify essential sequences. There is insufficient guidance to direct a person of skill in the art to select particular sequences or sequence lengths as essential for metalloproteinase activity. Without detailed direction as to which amino acid sequences are essential to the function of the polypeptide, a person of skill in the art would not be able to determine without undue experimentation which of the plethora of amino acid sequences encompassed by the instant claims would share the metalloproteinase activity of the polypeptide of SEQ ID NO:2, other than the polypeptide of SEQ ID NO:2.

The terms "comprising/comprises", "having" and "encoding" in non-elected base claim 1 and instant claim 4 are open-ended, they expand the polypeptide to include additional non disclosed amino acids. There is insufficient guidance and predictability in determining which structure would lead to function of ADAMS polypeptide and that the relationship between the sequence of a peptide and it's tertiary structure was not understood and was not predictable. Ngo *et al* teach that the amino acid positions within the polypeptide/protein that can tolerate change such as conservative substitution or no substitution, addition or deletion which are critical to maintain the protein's structure will require guidance (see Ngo et al., 1994, The Protein Folding Problem and

Tertiary Structure Prediction, pp. 492-495). Given the lack of sufficient guidance and working examples, predicting what changes can be made to the amino acid sequence of SEQ ID NO: 2 that after modification will retain the same function as ADAMTS-M protein is unpredictable. Also the detailed knowledge of the ways in which the product's structure relates to its functional usefulness is unpredictable.

The instant claims recite polypeptides encoded by a "nucleotide sequence having at least 80% identity" or encoded by a "nucleotide sequence of at least 15 contiguous nucleotides that hybridizes under stringent conditions to the polynucleotide molecule of SEQ ID NO:1". Such a recitation does not require that the amino acid encoded by the full length sequence set forth in SEQ ID NO:1; but rather encompasses any amino acid sequence comprising either the full length of SEQ ID NO:2 or *any fragment*. However, the specification does not appear to have provided sufficient guidance as to which fragments of SEQ ID NO:2 would share the metalloproteinase activity. Thus it would require undue experimentation of the skilled artisan to determine which fragments of SEQ ID NO:2 would have the functional usefulness.

The fact that two nucleic acid sequences will hybridize under moderate or stringent conditions does not in and of itself require that the two sequences share any functional activity. Thus the same observations apply to the recitation of "nucleotides that hybridizes under stringent conditions" as were noted above with respect to "percent identity" language. Further, it was well known in the art at the time the invention was made that hybridization could occur between two sequence based upon short stretches of 100% identity. Thus a great deal of sequence variability *with respect to the full-length nucleic acid* is possible in the absence of a clear recitation that the identity is over the full length of SEQ ID NO:1. Thus as for the recitation of percent identity, hybridization language in the absence of *a testable function* and limitations regarding both the *hybridization conditions* and the *sequence length over which the hybridization takes place*; does not allow the skilled artisan to make and use the polypeptides encoded by hybridizing nucleotides commensurate in scope with the instant claims without undue experimentation.

Also, at issue is whether or not the claimed pharmaceutical composition would function to treat "arthritis (osteoarthritis and rheumatoid arthritis), inflammatory bowel disease, Crohn's disease, emphysema, acute respiratory distress syndrome, asthma, chronic obstructive pulmonary disease, Alzheimer's disease, organ transplant toxicity and rejection, cachexia, allergy, cancer (such as solid tumor cancer including colon, breast, lung, prostate, brain and hematopoietic malignancies including leukemia and lymphoma), tissue ulcerations, restenosis, periodontal disease, epidermolysis bullosa, osteoporosis, loosening of artificial joints implants, atherosclerosis (including atherosclerotic plaque rupture), aortic aneurysm (including abdominal aortic and brain aortic aneurysm), congestive heart failure, myocardial infarction, stroke, cerebral ischemia, head trauma, spinal cord injury, neurodegenerative diseases (acute and chronic), autoimmune disorders, Huntington's disease, Parkinson's disease, migraine, depression, peripheral neurophathy, pain, cerebral amyloid angiopathy, nootropic or cognition enhancement, amyotrophic lateral sclerosis, multiple sclerosis, ocular angiogenesis, corneal injury, macular

degeneration, abnormal wound healing, burns, infertility or diabetic shock. No examples were presented to treat any disorder.

In re Fisher, 166 USPQ 18 indicates that the more unpredictable an area is, the more specific enablement is necessary in order to satisfy the statute. Since no *in vivo* animals were used as model system to treat arthritis (osteoarthritis and rheumatoid arthritis), inflammatory bowel disease, Crohn's disease, emphysema, acute respiratory distress syndrome, asthma, chronic obstructive pulmonary disease, Alzheimer's disease, organ transplant toxicity and rejection, cachexia, allergy, cancer (such as solid tumor cancer including colon, breast, lung, prostate, brain and hematopoietic malignancies including leukemia and lymphoma), tissue ulcerations, restenosis, periodontal disease, epidermolysis bullosa, osteoporosis, loosening of artificial joints implants, atherosclerosis (including atherosclerotic plaque rupture), aortic aneurysm (including abdominal aortic and brain aortic aneurysm), congestive heart failure, myocardial infarction, stroke, cerebral ischemia, head trauma, spinal cord injury, neurodegenerative diseases (acute and chronic), autoimmune disorders, Huntington's disease, Parkinson's disease, migraine, depression, peripheral neurophathy, pain, cerebral amyloid angiopathy, nootropic or cognition enhancement, amyotrophic lateral sclerosis, multiple sclerosis, ocular angiogenesis, corneal injury, macular degeneration, abnormal wound healing, burns, infertility or diabetic shock. It is not clear how to arrive to the claimed therapeutic strategy. The specification does not adequately teach how to effectively treat arthritis (osteoarthritis and rheumatoid arthritis), inflammatory bowel disease, Crohn's disease, emphysema, acute respiratory distress syndrome, asthma, chronic obstructive pulmonary disease, Alzheimer's disease, organ transplant toxicity and rejection, cachexia, allergy, cancer (such as solid tumor cancer including colon, breast, lung, prostate, brain and hematopoietic malignancies including leukemia and lymphoma), tissue ulcerations, restenosis, periodontal disease, epidermolysis bullosa, osteoporosis, loosening of artificial joints implants, atherosclerosis (including atherosclerotic plaque rupture), aortic aneurysm (including abdominal aortic and brain aortic aneurysm), congestive heart failure, myocardial infarction, stroke, cerebral ischemia, head trauma, spinal cord injury, neurodegenerative diseases (acute and chronic), autoimmune disorders, Huntington's disease, Parkinson's disease, migraine, depression, peripheral neurophathy, pain, cerebral amyloid angiopathy, nootropic or cognition enhancement, amyotrophic lateral sclerosis, multiple sclerosis, ocular angiogenesis, corneal injury, macular degeneration, abnormal wound healing, burns, infertility or diabetic shock or reach any therapeutic endpoint in mammals by administrating the therapeutic composition. The specification does not teach how to arrive to the development of effective in vivo mammalian therapeutic treatment, commensurate in scope with the claimed invention. Therefore, it is not clear that the skilled artisan could predict the efficacy of the pharmaceutical composition exemplified in the specification. For example, treatment of autoimmune disorder will vary depending upon factors such as the condition of the host and burden of disease. Van Noort et al. (International Review of Cytology, 1998) indicate factors that effect autoimmune disease such as genetic, environmental and hormonal (Page 176, Paragraph 3).

The specification does not provide sufficient teaching as to how it can be assessed that treatment of the above mentioned diseases were achieved after the administration of the therapeutic composition of the invention.

Reasonable correlation must exist between the scope of the claims and scope of the enablement set forth. In view on the quantity of experimentation necessary the limited working examples, the nature of the invention, the state of the prior art, the unpredictability of the art and the breadth of the claims, it would take undue trials and errors to practice the claimed invention.

13. Claims 3 and 15 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant is in possession of polypeptide SEQ ID NO: 2 encoded by nucleotide of SEQ ID NO:1, and metalloproteinase (aa 98-311 of SEQ ID NO:2), disintegrin domain (aa 324-394 of SEQ ID NO: 2), prodomain (aa 1-97 of SEQ ID NO:2), and thrombospondin submotif (aa 410-473 and 1099-1156 of SEQ ID NO:2) thereof.

Applicant is not in possession of any polypeptide encoded by any nucleotide sequence having at least 80% identity to a nucleotide sequence encoding an ADAMTS-M polypeptide of SEQ ID NO:2, or a metalloproteinase, disintegrin domain, prodomain, or thrombospondin submotif thereof, or their complement in non-elected base claim 1a and 1c respectively; any polypeptide encoded by any nucleotide sequence of at least 15 contiguous nucleotides that hybridizes under stringent conditions to the polynucleotide molecule of SEQ ID NO: 1 in non-elected base claim 1b or its complement in non-elected base claim 1c; or a composition comprising any pharmaceutical composition for the treatment of arthritis (osteoarthritis and rheumatoid arthritis), inflammatory bowel disease, Crohn's disease, emphysema, acute respiratory distress syndrome, asthma, chronic obstructive pulmonary disease, Alzheimer's disease, organ transplant toxicity and rejection, cachexia, allergy, cancer (such as solid tumor cancer including colon, breast, lung, prostate, brain and hematopoietic malignancies including leukemia and lymphoma), tissue ulcerations, restenosis, periodontal disease, epidermolysis bullosa, osteoporosis, loosening of artificial joints implants, atherosclerosis (including atherosclerotic plaque rupture), aortic aneurysm (including abdominal aortic and brain aortic aneurysm), congestive heart failure, myocardial infarction, stroke, cerebral ischemia, head trauma, spinal cord injury, neurodegenerative diseases (acute and chronic), autoimmune disorders, Huntington's disease, Parkinson's disease, migraine, depression, peripheral neurophathy, pain, cerebral amyloid angiopathy, nootropic or cognition enhancement, amyotrophic lateral sclerosis, multiple sclerosis, ocular angiogenesis, corneal injury, macular degeneration, abnormal wound healing, burns, infertility or diabetic shock in claim 15.

Applicant has disclosed only polypeptide of SEQ ID NO: 2; therefore, the skilled artisan cannot envision all the contemplated amino acid sequence possibilities recited in the instant claims. Consequently, conception cannot be achieved until a representative description of the structural and functional properties of the claimed invention has occurred, regardless of the complexity or simplicity of the method. Adequate written description requires more than a mere statement that it is part of the invention. The sequences themselves are required. See *Fiers v. Revel*, 25 USPQ2d 1601, 1606 (CAFC1993). The Guidelines for the Examination of Patent Application Under the 35 U.S.C.112, ¶ 1"Written Description" Requirement make clear that the written description requirement for a claimed genus may be satisfied through sufficient description of a representative number of species disclosure of relevant, identifying characteristics, i.e., structure or other physical and or chemical properties, by functional characteristics coupled with a known or disclosed correlation between function and structure, or by a combination of such identifying characteristics, sufficient to show the applicant was in possession of the genus (Federal Register, Vol. 66, No. 4, pages 1099-1111, Friday January 5, 20001, see especially page 1106 3rd column).

Vas-Cath Inc. v. Mahurkar, 19 USPQ2d 1111, makes clear that "applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention. The invention is, for purposes of the written description inquiry, whatever is now claimed." (See page 1117.) The specification does not "clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed." (See Vas-Cath at page 1116.). Consequently, Applicant was not in possession of the instant claimed invention. See University of California v. Eli Lilly and Co. 43 USPQ2d 1398.

Applicant is directed to the Revised Interim Guidelines for the Examination of Patent Applications Under the 35 U.S.C. 112, ¶ 1 "Written Description" Requirement, Federal Register, Vol. 66, No. 4, pages 1099-1111, Friday January 5, 2001.

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claim 3 is rejected under 35 U.S.C. 102(a) as being anticipated by Young *et al* (Jan. 2000) (GenBank Accession No. AJ011374).

Young et al teaches a polypeptide encoded by a 2,217 polynucleotide molecule comprising the complement of a nucleotide sequence of at least 15 contiguous nucleotides at positions (622-1,605) that hybridizes under stringent conditions to the polynucleotide molecule of claimed SEQ ID NO:1 as recited in non-elected base claim 1c. The term "comprising" in non-elected base claim 4 is open ended. It would open up the claim to include the reference polypeptide encoded by the 2,217 polynucleotide molecule.

The reference teachings anticipate the claimed invention.

16. Claims 3 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S Patent No. 5,466,584.

The `584 patent teaches a polypeptide (389 aa) encoded by a 1,167 polynucleotide molecule comprising a nucleotide sequence of at least 15 contiguous nucleotides at positions (42-68) that hybridizes under stringent conditions to the polynucleotide molecule of claimed SEQ ID NO:1 as recited in non-elected base claim 1b. The term "comprising" in non-elected base claim 4 is open ended. It would open up the claim to include the reference polypeptide encoded by the 1,167 polynucleotide molecule.

Claim 15 is included because the `584 patent teaches that the polypeptide can be along with ancillary buffers (column 4 lines 1-10 in particular). Buffers are considered to be a pharmaceutically acceptable carrier.

The reference teachings anticipate the claimed invention.

17. Formal drawings have been submitted which fail to comply with 37 CFR 1.84. Please see the enclosed form PTO-948.

18. **1. Correction of Informalities -- 37 CFR 1.85**

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT

be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.

19. It appears that the polypeptide of SEQ ID NO: 2 encoded by SEQ ID NO: 1, the metalloproteinase, disintegrin, prodomain and thrombospondin submotif thereof are free of prior art.

20. No claim is allowed.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maher Haddad, whose telephone number is (703) 306-3472. The examiner can normally be reached Monday to Friday from 8:00 to 4:30. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached at (703) 308-3973. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1600 receptionist whose telephone number is (703) 308-0196.

Papers related to this application may be submitted to Technology Center 1600 by facsimile transmission. Papers should be faxed to Technology Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center telephone number is (703) 305-3014.

Maher Haddad, Ph.D.
Patent Examiner
Technology Center 1600
July 1, 2002

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